

## TeleCommunication Systems, Inc. P-ANI Waiver Petition - Summary

- TCS processes call location and 911 routing information for almost 50% of VoIP and wireless 911 calls.
- TCS calculates a caller's geographic location at the time a 911 call is made by using a "transmission key" called a "P-ANI".<sup>1</sup> P-ANI are managed by, NeuStar, Inc., under a contract with the FCC.
- By letter dated September 8, 2006 from Thomas J. Navin, Chief, FCC Wireline Competition Bureau to the North American Numbering Council and NeuStar, Inc., Mr. Navin required companies like TCS seeking P-ANI to first be licensed or certified by a state Public Service Commission (PUC) consistent with Part 52 of the Commission's Rules **before receiving** P-ANI.<sup>2</sup>
- Some state PUCs permit companies like TCS to be "certified", as required by the FCC's rules; however, in many states the process has created expensive and unanticipated litigation, contested applications, or other similar issues. In summary, TCS believes it may not be possible to comply with the FCC's P-ANI certification requirement.
- The FCC Staff recommended that TCS file for a waiver of the rule and TCS did so on February 20, 2007. When there was no action on the waiver request for over 14 months, TCS renewed the waiver with an additional filing on April 21, 2008. TCS filed a waiver request in the NET 911 Act of 2008 - Docket (08-171), and has made other similar filings. To date, there has been no action despite repeated visits to the FCC in support of the waiver.
- TCS believes that its waiver request is well justified in both law and fact:
  - Failure to grant TCS's waiver request could eventually result in significant disruptions to E911 and homeland security services.
  - State PUC certification is a cumbersome and inaccurate process that has no relation to E911 or public services and does not further the FCC's E911 goals. It was a poor decision that resulted in bad policy.
  - The FCC has existing statutory authority to grant TCS's waiver request and, under appropriate circumstances, has granted many waiver requests in the past.
  - The Navin Letter recognizes the potential for a waiver of its own requirements and TCS qualifies under those requirements for such a waiver.
  - Granting TCS's waiver request will not violate any other FCC rule and TCS will agree to follow all other FCC rules related to P-ANI services as part of its waiver request.
  - TCS's waiver request is supported by others in the emergency services industry.
  - With Passage of the NET 911 Act of 2008, there is a clear demonstration of Congressional intent that VoIP companies must provide E911 services and have access to the resources necessary to do so. VoIP companies rely on 911 vendors such as TCS, who need unrestricted access to P-ANI to fulfill this mission. Congress has "closed" the certification loophole for VoIP companies (who are not "certified" in any case) and it is logical to argue that they have closed it for TCS also.
- **Therefore, the FCC now has two options** – it can grant P-ANI access to TCS under authority of the NET 911 Act of 2008 or can follow the traditional waiver process.

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<sup>1</sup> P-ANI (pseudo automatic number identification) are 10-digit numbers that, when received by the wireless/VoIP company during an E911 call, trigger the equipment to ask for the caller's location so that the E911 call will route correctly.

<sup>2</sup> Letter dated September 8, 2006 from Thomas J. Navin, Chief, Wireline Competition Bureau to Thomas M. Koutsy, Chair North American Numbering Council and Amy L. Putnam, Director, Number Pooling Services NeuStar, Inc. ("NeuStar") (the "Navin Letter").

## **P-ANI Waiver Petition - Background**

- E911 service is a vital public service that saves countless lives and property every year, and is a critical component of our nation's homeland security infrastructure. Wireless/cellular companies and VoIP companies are required to provide E911 calling services by Federal Communications Commission (FCC) rules.
- Wireless/cellular and VoIP callers can and do change their locations when making telephone calls. If such a caller makes an E911 emergency call, FCC rules require that the caller's location is calculated and that the E911 emergency call is sent to the closest public service answering point (PSAP) based on the caller's location.
- TCS provides location information for E911 calls for over 100 million subscribers of wireless/cellular and VoIP services and processes location information for over 140,000 E911 call per day (approximately 50% of all such E911 calls). When performing this service, TCS is called a VoIP Positioning Service (VPC).
- The technical process that TCS uses to calculate a caller's geographic location at the time a call is made involves transmitting the location information over a network using a "transmission key" that helps the call route to the correct public service agency.<sup>1</sup> The technical term for these "transmission keys" is P-ANI. TCS does not own the P-ANI it uses. They are managed by a third party administrator, NeuStar, Inc., under a contract with the FCC and assigned according to rules set up by the FCC.
- By letter dated September 8, 2006 from Thomas J. Navin, Chief, FCC Wireline Competition Bureau to the North American Numbering Council and NeuStar, Inc., Mr. Navin indicated that companies like TCS seeking P-ANI must first be licensed or certified by a state Public Service Commission (PUC) consistent with Part 52 of the Commission's Rules before receiving the P-ANI keys.<sup>2</sup>
- In attempting to comply with this change in the P-ANI administration rules, TCS has discovered that state PUC's have very different certification processes. Some states permit companies like TCS to be "certified", as required by the FCC's rules; however, in many states the process has created expensive and unanticipated litigation, contested applications, or other similar issues. In summary, TCS does not believe that it can technically comply with the FCC's P-ANI certification requirement and that the rule was enacted without any sound data as to the capability of any company to successfully comply.
- When TCS recognized these difficulties, it consulted with the FCC Staff. The Staff recommended that TCS file for a waiver of the rule and TCS did so on February 20, 2007. When there was no action on the waiver

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<sup>1</sup> P-ANI (pseudo automatic number identification) are 10-digit numbers that, when received by the wireless/VoIP company during an E911 call, trigger the equipment to ask for the caller's location so that the E911 call will route correctly. They are non-dialable numbers that are only used between carriers.

<sup>2</sup> Letter dated September 8, 2006 from Thomas J. Navin, Chief, Wireline Competition Bureau to Thomas M. Koutsy, Chair North American Numbering Council and Amy L. Putnam, Director, Number Pooling Services NeuStar, Inc. ("NeuStar") (the "Navin Letter").

### **P-ANI Waiver Petition - Background**

request for over 14 months, TCS renewed the waiver with an additional filing on April 21, 2008. TCS has also filed a waiver request in the NET 911 Act of 2008 Docket (08-171). To date, there has been no action despite repeated visits to the FCC in support of the waiver.

- TCS believes that its waiver request is well justified in both law and fact and has detailed its reasons before the FCC in its filings:
  - Failure to grant TCS's waiver request could eventually result in significant disruptions to E911 and homeland security services.
  - State PUC certification is a cumbersome and inaccurate process that has no relation to E911 or public services and does not further the FCC's E911 goals. It was a poor decision that resulted in bad policy.
  - The FCC has existing statutory authority to grant TCS's waiver request and, under appropriate circumstances, has granted many waiver requests in the past.
  - The Navin Letter recognizes the potential for a waiver of its own requirements and TCS qualifies under those requirements for such a waiver.
  - Granting TCS's waiver request will not violate any other FCC rule and TCS will agree to follow all other FCC rules related to VPC services as part of its waiver request.
  - TCS's waiver request is supported by others in the emergency services industry.
  - **NEW** – With Passage of the NET 911 Act of 2008, there is a clear demonstration of Congressional intent that VoIP companies must provide E911 services and have access to the resources necessary to do so. VoIP companies rely on VPC vendors such as TCS, who need unrestricted access to P-ANI to fulfill this mission. Congress has "closed" the certification loophole for VoIP companies (who are not "certified" in any case) and it is logical to argue that they have closed it for TCS also.
  - **Therefore, the FCC now has two options** – it can grant P-ANI access to TCS under authority of the NET 911 Act of 2008 or can follow the traditional waiver process.
- We are requesting your support with the hope that you will review and take action on our long standing petition so that wireless/cellular and VoIP E911 users can be assured of continued quality services for their emergency calls.

May 11, 2009

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

Re: Petition of TeleCommunication Systems, Inc. and  
HBF Group, Inc for Waiver of Part 52 of the Commission's  
Rules, CC Docket NO. 99-200

Dear Ms. Dortch:

The purpose of this letter is to refresh the record in CC Docket No. 99-200 with regard to the above-referenced Petition of TeleCommunication Systems, Inc. ("TCS") and HBF Group, Inc. for Waiver of Part 52 of the Commission's Rules (filed February 20, 2007) to permit TCS as a VoIP Positioning Center ("VPC") to be eligible to receive pseudo Automatic Number Identification resources ("p-ANIs") without having to demonstrate that it is certificated in all fifty states.<sup>1</sup>

### Introduction

TCS is one of the primary providers of VPC service and in this capacity provides location information for E911 calls for over 100 million subscribers of wireless and VoIP providers. In so doing, TCS handles over 120,000 E911 call per day. VPC service of the type provided by TCS is critical to the ability of VoIP providers to comply with the Commission's requirement that they supply 911 capabilities to their customers. In order to provide this service, VPCs such as TCS must have access to p-ANIs. Unfortunately, by letter dated September 8, 2006 from Thomas J. Navin, Chief, Wireline Competition Bureau to the North American Numbering Council and NeuStar, Inc., Mr. Navin indicated that VPCs seeking p-ANIs from NeuStar must be licensed or certified by the FCC or a state commission consistent with Part 52 of the Commission's Rules.<sup>2</sup>

<sup>1</sup> *Petition of TeleCommunication Systems, Inc. and HBF Group, Inc. for Waiver of Part 52 of the Commission Rules*, CC Docket No. 99-200 (filed February 20, 2007) ("TCS Petition"). Section 52.15(g)(2)(i) provides in relevant part that an applicant for initial numbering resources must provide evidence that it "is authorized to provide service in the area for which the numbering resources are being requested." TCS seeks a waiver of this requirement to the extent that its application would require TCS to obtain certification as a condition of eligibility for utilization of p-ANIs. TCS is not seeking a waiver of the remainder of part 52.

<sup>2</sup> Navin Letter at 3.



Although TCS provides VPC throughout the United States, it is not certified in all jurisdictions. Therefore, unless the Petition is granted, at some point a VPC such as TCS might not have access to a sufficient number of p-ANIs<sup>3</sup> and as a result the ability of its VoIP provider customers to meet their statutory obligation to provide E911 service pursuant to the NET 911 Improvement Act of 2008 would be seriously impaired.<sup>4</sup>

Although the Commission has acknowledged the pendency of the TCS Petition, to date it has not acted on TCS's request. Specifically, at footnote 66 in its *NET 911 Order* the Commission stated:

In this Order, therefore, we do not address whether we should modify or waive section 52.15(g)(2)(i) of the Commission's rules to allow VPC providers that are neither carriers nor interconnected VoIP providers to obtain numbering resources. See TCS Comments at 4 (requesting that the Commission address issues raised in a TCS Petition for waiver that is pending in CC Docket No. 99-200). Our determination that such providers are not granted access rights under the NET 911 Act does not prejudice the Commission's ultimate decision on any pending petitions for waiver.<sup>5</sup>

At the same time, the Commission determined that the rates, terms, and conditions pursuant to which VPCs must make p-ANIs and other capabilities available are subject to FCC regulation.<sup>6</sup> As a consequence, unlike VoIP providers, VPCs receive the "burdens" of regulations, but do not receive of the "benefits" in connection with "access to the capabilities they need to provide E911 service."<sup>7</sup> There is no reason to continue to discriminate in this fashion between VoIP providers and the VPCs upon whom, in many cases, they depend.

As will be demonstrated below, the Commission's continued failure to grant TCS' Waiver Petition is contrary to the public interest and may serve to delay the deployment of VoIP E911.<sup>8</sup> After two years of deliberation, we respectfully submit that it is appropriate for the Commission to act.

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<sup>3</sup> P-ANIs are critical components of VPC technology. One of the main purposes of a VPC is to provide call routing instructions to the VoIP service provider's softswitch so that E911 calls can be routed to the appropriate Public Service Answering Point ("PSAP"). The means by which the correct PSAP is communicated from the VPC to the softswitch is through the use of p-ANIs. After extensive and expensive testing, each p-ANI is assigned to a unique PSAP. Currently, VPCs obtain p-ANIs from a fixed "pool" that is to be shared by multiple VPC soft switches. Typically, approximately ten p-ANIs are assigned per PSAP, so that ten different calls from a variety of IP-enabled voice service providers can be processed simultaneously.

<sup>4</sup> "The NET 911 Act explicitly imposes on each interconnected VoIP provider the obligation to provide 911 and E911 service in accordance with Commission existing requirements." Report and Order, *In the Matter of Implementation of the NET 911 Improvement Act of 2008*, WCB Docket No. 08-171, para.3 (released October 21, 2008).

<sup>5</sup> *Id.* note 66.

<sup>6</sup> *Id.* at paras 30-34.

<sup>7</sup> See footnote 99 of the *NET 911 Order* where the Commission decides to afford VoIP Providers both the "benefits" and the "burdens" in connection with access to capabilities. *Id.* at note 99

<sup>8</sup> While the Commission granted VoIP providers the rights to access and manage p-ANI, the reality is that almost all VoIP providers do not have the resources to acquire, test, and manage p-ANI and the associated

**1. State Certification as a Precondition is Unsustainable and a Burden on the States**

Contrary to the position set forth in the Navin Letter, state certification should not be a precondition for VPC access to p-ANIs. In fact, the record demonstrates that state certification of VPCs is not required. There is no basis for applying the provisions of 47 C.F.R. § 52.15(g)(2)(i) as a condition for p-ANI eligibility. The state certification requirement upon which Mr. Navin relied was designed to address the question of how CLECs should obtain state licensing to offer residential and business voice services—none of which are at issue here.

It is difficult and costly for VPCs such as TCS to obtain state certification and the typical state process does not focus on issues of relevance to determining the eligibility of an entity to provide VPC service. CLEC state certification procedures, while appropriate for true “numbering resources” for the PSTN and to provide a legal basis for the negotiation of Interconnection Agreements, are simply not designed to determine the suitability of a VPC. The state CLEC certification process often contemplates the filing and approval of a retail tariff, for end-user customers, and/or a wholesale tariff, for use by other carriers. This process does not pertain to a VPC and does not address reliability or experience or any of the concerns which are pertinent to VPCs. In addition, as noted below, the State Public Service Commissions often find the process of certifying a VPC to be unconventional and distracting, if not burdensome on their already full workloads.

VPC state certification in fifty-one jurisdictions is impossible due to CLEC regulations in some states that prohibit certification for entities such as VPCs that do not provide dial tone to retail customers, do not have retail tariffs, do not have interconnection agreements, and other state specific requirements. In the alternative, VoIP providers themselves would be forced to become certificated in all jurisdictions—a task which at a minimum would delay VoIP E911 deployment and strain p-ANI resources.

As recent history demonstrates, those VPCs that have attempted to gain CLEC certification have met with mixed results because various jurisdictions have taken conflicting good faith positions (based on differing state laws and regulations) regarding VPC certification. For example, the Public Utilities Commission of Ohio (“PUCO”) refused to certify the VPC, Intrado Communications Inc., as a CLEC on the ground that “its telephone exchange activities are restricted in scope and, thus, do not extend to the level of a CLEC.”<sup>9</sup> Instead the PUCO went through the unusual and time consuming process of establishing a new designation known as a “competitive emergency services

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PSAP relationships. That is why the VPC relationship is so critical. As TCS has commented previously, the numbering and technology scaling that VPCs offer is critical to most VoIP providers.

<sup>9</sup> Finding and Order, *In the Matter of the Application of Intrado Communications, Inc. to Provide Competitive Local Exchange Services in the State of Ohio*, ¶7 Public Utilities Commission of Ohio, Case No. 07-1199-TP-ACE (Feb. 8, 2008).

telecommunications carrier”<sup>10</sup>, and limited such carriers to one per county. This could generate a race among VPCs to register in as many counties as possible “just in case” they someday acquire a customer in that county, with the ultimate effect being to force VSPs to hire multiple VPCs across the state of Ohio and thus creating a bizarre nightmare of monopolistic county-level contracts, testing, etc. In Virginia, Intrado has had difficulty negotiating an interconnection agreement because Embarq does not recognize it as a “carrier” and, as a result, Intrado is in arbitration before the FCC on the issue.<sup>11</sup> There have been similar problems in other states. On the other hand, the North Carolina Utilities Commission in a 107 page recommended arbitration order found that Intrado was entitled to interconnection under Section 251 of the Communications Act even the particular provisions were “less than perfectly lucid.”<sup>12</sup>

In TCS’ case, state certification would add nothing. TCS is a public company which has demonstrated the required level of integrity as an operator. Moreover, it already provides nationwide VPC service. TCS does agree, however, that it must comply with the reporting requirements of the Part 52 numbering rules and already is complying with all applicable reporting requirements to the FCC.<sup>13</sup>

## **2. Grant of TCS’ Petition Would Promote the More Efficient Use of Numbering Resources**

Permitting TCS to access numbering resources without the burden of first obtaining state certification is a more efficient use of numbering resources. The alternative of requiring thousands of interconnected VoIP providers to take the time and make the effort to secure p-ANIs would prove to be unworkable.

Although TCS has been able to self-administer a sufficient number of p-ANIs to meet the E911 requirements of its clients, in the long run, TCS might not be able to acquire and manage a sufficient number of p-ANIs for shared use among its nomadic VoIP provider customers. The negative consequences and disruption to the emergency service capabilities of VoIP providers and their customers would be significant if this were to occur. Nomadic VoIP providers would be required to immediately seek certification in all fifty-one jurisdictions and obtain, manage, test, and deploy their own p-ANIs.<sup>14</sup> This would create confusion and significantly delay VoIP E911 deployment. It would potentially exhaust the reservoir of assignable p-ANI and would be completely contrary to NENA recommendations. Moreover, it would require each PSAP to test, at considerable time and expense, with dozens (or hundreds) of interconnected nomadic VoIP service providers that might never actually use the p-ANIs assigned to them. Most

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<sup>10</sup> *Id.* It should be noted that the case was filed in November 2007 and continues to this day.

<sup>11</sup> *Petition of Intrado Communications of Virginia Inc., In the Matter of Petition of Intrado Communications of Virginia Inc.*, WC 08-33 (filed March 6, 2008).

<sup>12</sup> See Telecommunications Reports-May 15, 2009 “N.C. Regulators Rule Intrado Can Interconnect with AT&T”

<sup>13</sup> For example, TCS files E911 service outage reports on a regular basis

<sup>14</sup> It has been suggested that TCS could simply use its VoIP customer’s pANI resources; however, this does not address the continuing number conservation, testing, and deployment issues discussed herein. Using the VoIP customer’s p-ANI is simply not a solution.

VoIP providers are too small to undertake these certification and testing efforts, and without the ability to rely on VPCs might have to choose between limiting their operations and ignoring their statutory obligations. These concerns are not inconsequential.

Although it is impossible to address the question of the impact of VPCs on number conservation with complete precision, TCS's calculations were contained in its previous waiver filing<sup>15</sup> leading to the conclusion that a VPC could service the entire country with less than 1% of the p-ANI resources required by VoIP providers to accomplish the same services.<sup>16</sup> The Commission should encourage such an efficient use of resources.

### **3. Grant of TCS' Petition Will Promote Public Safety**

The public safety benefits of using VPCs as p-ANI aggregators are also evident. On an average day, TCS routes over 120,000 E911 calls without difficulty. The disruption, confusion, and even danger to our national E911 system that would be involved in forcing hundreds of nomadic VoIP providers to obtain, test, and maintain possibly millions of p-ANIs argues powerfully in favor of TCS's simple and easily granted waiver request.

The negative impact that the Commission's position could have was recognized by The Association of Public-Safety Communications Officials-International ("APCO") in a Position Statement it posted on April 16, 2008. APCO indicated in part:

APCO International is concerned that some providers of VoIP Position Centers (VPC) may have to discontinue services to VoIP Service Providers (VSP) if they are denied access to pseudo Automatic Number Identification (p-ANI) codes.

APCO International respectfully requests that the Federal Communications Commission (Commission) fully examine the impact of a decision to deny VPC access to p-ANI codes and its affect on the ability of public safety answering points (PSAP) to locate VoIP 9-1-1 callers using current VPC services.

APCO International believes that if VPCs are forced to discontinue services to VSPs VoIP consumers may be at risk when calling 9-1-1.<sup>17</sup>

TCS believes that APCO is justified in its concern that consumers may be at risk if VPCs are forced to discontinue (or are unable to begin to offer) E911 services to VoIP providers. It is imperative that the Commission act in the affirmative on the Petition.

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<sup>15</sup> *Reply Comments of Telecommunication Systems Inc.*, WC Docket No. 07-243; WC Docket No. 07-244; WC Docket No. 04-36; CC Docket No. 95-116; and CC Docket No. 99-200 (Filed April 21, 2008) ("TCS Reply Comments"), at page 11. TCS incorporates by reference all its earlier Waiver filings.

<sup>16</sup> "As these estimates demonstrate, TCS believes the number conservation benefits involving the use of 122,000 p-ANIs versus the use of almost 16 million P-ANIs are clear." *Id.*

<sup>17</sup> *TCS and HBF Petition to Waive Part 52 of Commission Rules Position Statement*, APCO Government Affairs <http://www.apcointl.org/new/government/positionstatements.php> (April 16, 2008)



#### **4. Grant of TCS' Petition Is Consistent With the Navin Letter and the NET 911 Act**

As the Commission has indicated, nothing in either the NET 911 Act or the *NET 911 Order* prevents the Commission from granting TCS' Petition.<sup>18</sup> VPCs should not be relegated to receiving only the "burdens" of regulation without being allowed the "benefits" in connection with "access to the capabilities they need to provide E911 service." Such a result is unjust and would limit competitive entry by resource-constrained smaller interconnected VoIP providers dependent upon VPC service or by other VoIP providers that have made an economic decision to allocate resources to customer services as opposed to p-ANIs.

It makes no sense for the Commission to eschew the option offered by the Navin Letter to grant waivers to VPCs such as TCS, and to allow the Rounting Number Authority (RNA) to assign pANI without CLEC certification.<sup>19</sup> Such authorization would not undermine the authorities of local PUCs.

The Net911 Act makes clear that the relevant capabilities necessary to provide E911 service, and the rates, terms, and conditions pursuant to which they are provided, are to be controlled by FCC regulation, not state certification. While the Navin letter was arguably drafted before the importance of VPCs was generally recognized, Congress was very aware of the significant role played by VPCs when it adopted the NET 911 Act. It was noted at page 6 of the House Report that in order to gain access to key facilities and infrastructure, such as p-ANIS, VoIP providers have "entered into commercial arrangements with LECs or third parties to gain access to 911 components." It was further noted that the NET 911 Act was not intended to "abrogate existing commercial arrangements relating to the provision of 911 and E911 services entered into by VoIP providers prior to enactment" of the Act.<sup>20</sup> As a consequence, the grant of TCS' Petition is consistent with Congressional intent that interconnected VoIP providers have meaningful rights of access to any and all capabilities necessary to provide 911 and E911 service from entities that own or control those facilities, particularly from those VPCs from whom they are already receiving capabilities such as p-ANIs.

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<sup>18</sup> *NET 911 Order*, *supra* at n. 66

<sup>19</sup> See 47 C.F.R. § 1.925(b)(3)(i) ("The Commission may grant a request for waiver if it is shown that [t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case and that a grant of the required waiver would be in the public interest[.]")

<sup>20</sup> H.R. Rep. No. 110-442 at 6, 13 (2007)

## Conclusion

For the reasons herein stated, we respectfully request that the Commission should grant TCS' Petition for Waiver of Part 52 of the Commission's Rules.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Russell Frisby, Jr.", with a stylized flourish at the end.

H. Russell Frisby, Jr.

cc: Ann Stevens  
Marilyn Jones  
Tim Stelzig

204651



H. RUSSELL FRISBY, JR.  
TEL: (202) 939-7980  
RFRISBY@FH-LAW.COM

February 26, 2009

**VIA ELECTRONIC FILING**

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554

**Re: Notice of Oral Ex Parte Communication, In the Matter of Petition of TeleCommunication Systems, Inc. and HBF Group, Inc. for Waiver Of Part 52 of the Commission's Rules, CC Docket 99-200**

On February 25, 2009, the undersigned as counsel, together with Kim Scovill, Senior Director of Government Relations of TeleCommunication Systems, Inc. ("TCS") met with Jennifer McKee of Chairman Copp's office. TCS' representatives discussed why the Federal Communications Commission's grant of the above-referenced petition is necessary to protect public safety by ensuring the continued efficient provision and deployment of VoIP E911 service. Copies of the attached pleading were left with Ms. McKee.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Russell', with a large, sweeping flourish extending to the right.

H. Russell Frisby, Jr.  
Counsel to TeleCommunication Systems, Inc.

Attachment

cc: Jennifer McKee

203592v1



**FLEISCHMAN  
AND  
HARDING LLP**

H. RUSSELL FRISBY, JR.  
TEL: (202) 939-7980  
RFRISBY@FH-LAW.COM

October 20, 2008

**VIA ELECTRONIC FILING**

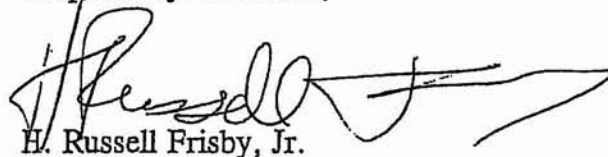
Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554

**Re: Initial Comments In the Matter of the Petition of VIXXI Solutions, Inc. for  
Limited Waiver of Number Access Restrictions CC Docket No. 99-200 and  
WC Docket No. 08-206**

Enclosed on behalf of TeleCommunication Systems, Inc. ("TCS") are initial comments  
in the above referenced proceeding.

The comments are being filed electronically using the Commission's Electronic  
Comment Filing System ("ECFS") for inclusion in the record of the above-referenced  
proceedings.

Respectfully submitted,



H. Russell Frisby, Jr.  
Counsel to TeleCommunication Systems, Inc.

Attachment

cc: Competition Policy Division  
Wireline Competition Bureau  
Best Copy and Printing, Inc.



**Before The  
Federal Communications Commission  
Washington, DC 20554**

**In the Matter of the Petition of  
VIXXI Solutions, Inc. for Limited Waiver of  
Number Access Restrictions**

**CC Docket No. 99-200**

**WC Docket No. 08-206**

**INITIAL COMMENTS  
OF  
TELECOMMUNICATION SYSTEMS, INC.**

**Kim Robert Scovill  
Senior Director Government Affairs  
TeleCommunication Systems, Inc.  
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**H. Russell Frisby, Jr.  
Fleischman and Harding LLP  
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INITIAL COMMENTS  
OF  
TELECOMMUNICATION SYSTEMS, INC.

TeleCommunication Systems, Inc. ("TCS") hereby submits its initial comments in response to the Public Notice ("Notice") released by the Federal Communications Commission ("Commission" or "FCC") in the above-referenced proceeding.<sup>1</sup> For purposes of brevity, TCS will address the primary question contained in the VIXXI Petition: should an otherwise qualified VoIP Positioning Center ("VPC") vendor be required to be state certified as a competitive local exchange company ("CLEC") prior to receiving access to pseudo ANI ("p-ANI") resources? For the many reasons contained in TCS's own Waiver Petition<sup>2</sup> and subsequent filings in the Commission's NET 911 Act NPRM<sup>3</sup>, TCS believes that the answer is "no" and that the case supporting the FCC's authority to grant waivers to qualified petitioners or to permit p-ANI access under authority of the NET 911 Act has been amply documented.

In making this statement TCS assumes that a petitioner is otherwise qualified, as TCS is, to be a VPC by virtue of reasonable criteria that the Commission would detail as part of the waiver process or as established under rules enabling the NET 911 Act. TCS, for example, is historically one of the industry's primary providers of VPC service with over 10-years experience and provides location information for E911 calls for over 100 million subscribers of wireless and VoIP services. In so doing, TCS handles an average

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<sup>1</sup> *Petition of VIXXI Solutions, Inc. for Limited Waiver of Number Access Restrictions*, CC Docket No. 99-200, (filed September 8, 2008) ("Notice")

<sup>2</sup> *Petition of TeleCommunication Systems, Inc. and HBF Group, Inc. for Waiver of Part 52 of the Commission Rules*, CC Docket No. 99-200 (filed February 20, 2007) ("Waiver Petition"). The Waiver Petition was updated by TCS's April 21, 2008 Reply Comments in CC Docket No. 99-200, incorporated herein as Attachment A.

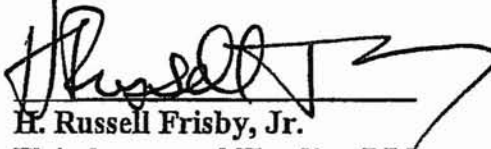
<sup>3</sup> *Notice of Proposed Rulemaking In the Matter of the Implementation of the NET 911 Improvement Act of 2008*, WC Docket No. 08-171, (Adopted August 22, 2008 and Released August 25, 2008) ("NET 911 Act NPRM") TCS filed Initial Comments on September 9, 2008 and Reply Comments on September 17, 2008.

of over 140,000 E911 call per day with carrier grade reliability. TCS is a public company<sup>4</sup> with the verifiable financial and technical resources to assure its customers, the public service community, and the general public of dependable service continuity, and operates the only ISO 9001/TL9000<sup>5</sup> certified data center in the industry. The exact waiver criteria or NET 911 Act rules would be determined by the FCC; however, these are the types of reasonable benchmarks that TCS suggests would be necessary to assure the carriers and the public of reliable VPC services.

### **Conclusion**

For all the reasons stated in its previously submitted filings and for the new reasons stated here, TCS respectfully asks the FCC to grant its Waiver Petition or eliminate the p-ANI precertification requirement as part of the enactment of rules to support the NET 911 Act of 2008. In addition, the VIXXI Petition is deserving of full consideration and should be subject to the appropriate resolution under the same criteria.

Respectfully submitted,

  
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Dated: October 20, 2008

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<sup>4</sup> [www.telecomsys.com](http://www.telecomsys.com)

<sup>5</sup> TL9000/ISO9001 certifications represent compliance with global quality assurance and improvement programs. More information is available at <http://tl9000.org/>.

ATTACHMENT  
A



Before The  
Federal Communications Commission  
Washington, DC 20554

FILED/ACCEPTED

APR 21 2008

Federal Communications Commission  
Office of the Secretary

In the Matter of	)	
	)	
Telephone Number Requirements for	)	WC Docket No. 07-243
IP-Enabled Services Providers	)	
	)	
Local Number Portability Porting Interval	)	WC Docket No. 07-244
And Validation Requirements	)	
	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	
Telephone Number Portability	)	CC Docket No. 95-116
	)	
CTIA Petitions for Declaratory Ruling on	)	
Wireline-Wireless Porting Issues	)	
	)	
Final Regulatory Flexibility Analysis	)	
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200

REPLY COMMENTS OF  
TELECOMMUNICATION SYSTEMS, INC.

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**REPLY COMMENTS  
OF  
TELECOMMUNICATION SYSTEMS, INC.**

TeleCommunication Systems, Inc. ("TCS") hereby submits these reply comments in response to the Notice of Proposed Rulemaking released by the Federal Communications Commission ("Commission" or "FCC") in the above-referenced proceeding.<sup>1</sup> In the Notice the Commission asked, *inter alia*, for "comment on any other issues associated with the implementation of LNP for users of interconnected VoIP services."<sup>2</sup> In these reply comments TCS urges the FCC to grant TCS' Petition, filed in CC Docket 99-200, seeking a waiver of Section 52.15(g)(2)(i) of the Commission's Rules<sup>3</sup> so that TCS as a VoIP Positioning Center service provider ("VPC") is deemed to be an eligible user of and may obtain Emergency Service Query Keys ("ESQKs") without having to demonstrate that it has been "...licensed or certified by the FCC or a state commission to operate as a telecommunications carrier..."<sup>4</sup> It is necessary for the FCC to act now because otherwise the Commission will leave unresolved an issue which

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<sup>1</sup> *Telephone Number Requirements for IP-Enabled Services Providers*, WC Docket Nos. 07-243, 07-244, & 04-36, CC Docket Nos. 95-116 & 99-200, Report and Order, Declaratory Ruling, Order on Remand, and Notice of Proposed Rulemaking, 22 FCC Rcd 19531 (2007). As used herein, the term "*Porting Order*" shall refer to the Report and Order, Declaratory Ruling, and Order on Remand, and the term "*Notice*" shall refer to the Notice of Proposed Rulemaking.

<sup>2</sup> *Id.* at ¶53.

<sup>3</sup> *Petition of TeleCommunication Systems, Inc. and HBF Group, Inc. for Waiver of Part 52 of the Commission Rules*, CC Docket No. 99-200 (filed February 20, 2007) ("Waiver Petition"). Section 52.15(g)(2)(i) provides in relevant part that an applicant for initial numbering resources must provide evidence that it "is authorized to provide service in the area for which the numbering resources are being requested." TCS seeks a waiver of this requirement to the extent that its application would require TCS to obtain certification as a condition of eligibility for utilization of ESQKs. TCS is not seeking a waiver of the remainder of part 52.

<sup>4</sup> See Letter dated September 8, 2006 from Thomas J. Navin, Chief, Wireline Competition Bureau to Thomas M. Koutsy, Chair North American Numbering Council and Amy L. Putnam, Director, Number Pooling Services NeuStar, Inc. ("NeuStar") (hereinafter referred to as the "Navin Letter").

would negatively impact upon public safety by hindering the ability of interconnected nomadic VoIP carriers to offer full E911 capabilities for all ported numbers.

### Introduction And Summary

TCS is one of the primary providers of VPC service and in this capacity provides location information for E911 calls for over 100 million subscribers of wireless and VoIP service providers. In so doing, TCS handles over 110,000 E911 call per day. VPC service of the type provided by TCS is critical to the ability of interconnected VoIP service providers to comply with the Commission's requirement that they supply 911 capabilities to their customers. In order to provide this service, VPCs such as TCS must have access to ESQs. Unfortunately, by letter dated September 8, 2006 from Thomas J. Navin, Chief, Wireline Competition Bureau to the North American Numbering Council and NeuStar, Inc., Mr. Navin indicated that VPCs seeking ESQs from NeuStar must be licensed or certified by the FCC or a state commission consistent with Part 52 of the Commission's Rules.<sup>5</sup>

The Commission has in various instances recognized a "bright line" between both the privileges of and obligations imposed upon an entity deemed a telecommunications carrier and those applicable to a non-certificated entity. At the same time, however, as was recognized in the Navin Letter, the Commission also has a parallel tradition of granting waivers where appropriate. Specifically, the Commission may waive its rules for good cause<sup>6</sup> and where strict application of a rule would be contrary to the public

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<sup>5</sup> Navin Letter at 3.

<sup>6</sup> 47 C.F.R. § 1.3; see also *Administration of the North American Numbering Plan*, CC Docket No. 99-200, Order 20 FCC Rcd 2957, ¶ 4 (*SBCIS Numbering Waiver Order*), citing to *WALT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969), cert. denied, 409 U.S. 1027 (1972) ("*WALT Radio*").

interest.<sup>7</sup> In determining whether to grant a waiver, the Commission may consider hardship, equity, or the fact that a more effective implementation of public policy will attend the granting of the waiver.<sup>8</sup>

To date, one of the privileges that, absent a waiver, has been limited to entities with carrier status is access to numbering resources.<sup>9</sup> However, as was implicitly acknowledged in the Navin Letter,<sup>10</sup> Pseudo Automatic Number Identification (“p-ANI” which also include “ESQKs”) resources fall into a gray area; so much so, that the Bureau Chief believed it necessary to provide clarification for NeuStar regarding the management of p-ANI / ESQKs. Moreover, in so doing the Bureau indicated that the Commission is prepared to waive the aforementioned certification requirement upon a showing that applicable state and local emergency service fees were paid and appropriate universal services fund (“USF”) contributions were satisfied.<sup>11</sup> Given that ESQK / p-ANI resource are indispensable to TCS’s VPC business model, TCS subsequently filed its Waiver Petition requesting that the FCC waive the rule as outlined in the Navin Letter.

It is both appropriate and necessary for the FCC to address the issue of VPC access to ESQKs in this portion of this combined proceeding.<sup>12</sup> As previously noted, the Commission has specifically sought comment “on any other issues associated with the implementation of LNP for users of interconnected VoIP services.”<sup>13</sup> The *Porting Order*

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<sup>7</sup> *SBCIS Numbering Waiver Order* ¶ 4.; see also *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (“*Northeast Cellular*”).

<sup>8</sup> 6 *WAIT Radio*, 418 F.2d at 1159; *Northeast Cellular*, 897 F.2d at 1166.

<sup>9</sup> See *Porting Order* ¶ 20.

<sup>10</sup> The letter describes p-ANI as “...consisting of the same number of digits as...ANI, that is *not* a North American Numbering Plan (NANP) telephone directory number and be used in place of ANI . . .” Navin Letter at 1 footnote 1.

<sup>11</sup> *Id.* at 3.

<sup>12</sup> TCS’ Petition was assigned to CC Docket No. 99-200, one of the dockets included in this combined proceeding.

<sup>13</sup> *Porting Order* ¶53.



represents a continuation of the FCC's attempt to ensure that users of interconnected VoIP services have access to the same types of capabilities that other users have because "consumers' expectations for these [interconnected VoIP] services trend toward their expectations for other telephone services."<sup>14</sup> This effort began when the FCC required interconnected VoIP providers to supply 911 emergency calling capabilities.<sup>15</sup> Adequate number portability cannot be assured if questions remain regarding access to E911 capability;<sup>16</sup> likewise interconnected nomadic VoIP Service Providers cannot be sure that the FCC's E911 requirements can be met in all cases unless VPCs have access to ESQs. The inability of VPCs to do so represents a potential threat to public safety that must be addressed.

**I. VPC Service Is Critical If Interconnected Nomadic VoIP Service Providers Are To Have E911 Capability**

TCS is one of the two primary providers of VPC services which provide 99% of all call routing instructions to interconnected nomadic VoIP service providers and ALI data delivery to Public Safety Answering Points ("PSAPs"). ESQs are critical components of VPC technology. One of the main purposes of a VPC is to provide call routing instructions to the VoIP service provider's softswitch so that E911 calls can be routed to the appropriate PSAP. The means by which the correct PSAP is communicated from the VPC to the softswitch is through the use of ESQs. Each ESQ represents a different PSAP. Currently, VPCs obtain ESQs without restriction, and "pool" them to

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<sup>14</sup> *Id.* ¶11.

<sup>15</sup> *Id.* ¶53.

<sup>16</sup> This position also finds support in the Comments of Comcast Corporation, filed herein in response to the Notice, where it argues, albeit on a different matter, that the Commission should take steps to ensure that consumers do not lose access to E911 during the porting process. See Comments of Comcast at 18.

be shared by multiple VPC soft switches. Typically, approximately ten ESQKs are assigned per PSAP, so that ten different calls from a variety of interconnected VoIP service providers can be processed simultaneously. Without access to ESQKs, the VPCs will be obligated to use ESQKs provided by the VoIP service providers.

Today, VPCs obtain ESQKs via two primary methods. In most areas of the country, the ILEC has assumed the responsibility for managing the assignment of ESQKs and the VPCs obtain ESQKs from it. In other areas, the ILEC has eschewed management of ESQKs. In those localities, the existing VPCs formed a consortium to self-assign and jointly manage ESQKs and have continued to do so as a recognized existing issuing authority. Subsequently, the FCC created the Interim Routing Number Authority (IRNA) and empowered NeuStar to operate it subject to various FCC conditions, including those set forth in the Navin Letter, and NANC rules.

Grant of the proposed waiver will not have a limiting effect on numbering resources because the ESQKs are “non-dialable” numbers and should not really be considered numbering resources.<sup>17</sup> TCS does not provide voice or other end-user telephone-type services. Instead, TCS provides VPC service based on the NENA i2 Model pursuant to which it neither provides the voice path nor interconnects with the PSTN.

Moreover, the VPC approach can play a more general role with regard to LNP. In its comments, the National Emergency Number Association (“NENA”) encouraged the FCC “to consider the use of the VoIP Positioning Center (“VPC”) solution in place today

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<sup>17</sup> For example, no reporting is required for ESQKs because the FCC has held that since the category of “available numbers” is a “residual category,” carriers were not required to report such numbers. *See Report and Order and Further Notice of Proposed Rulemaking, In the Matter of Numbering Resource Optimization*, CC Docket No. 99-200, 15 FCC Rcd 7574, 7600 n. 99 (2000).

for VoIP customers for 9-1-1 routing” and as a means to “help resolve the routing issue that all N11/800-type services face today.”<sup>18</sup>

## II. There Is No Need To Apply Part 52’s Certification Requirement To VPCs

There is no basis for applying the provisions of 47 C.F.R. § 52.15(g)(2)(i) as a pre-condition for ESQK eligibility as was done in the Navin Letter. The state certification requirement upon which Mr. Navin relied was designed to address the question of how CLECs should obtain numbering resources—which is not at issue here.

Although States do have an interest in ESQK utilization, state certification is not required to address the states’ concerns. CLEC state certification procedures, while appropriate for true “numbering resources” for the PSTN and to provide a legal basis for the negotiation of Interconnection Agreements, are not designed to determine the suitability of a VPC. The state CLEC certification process also often contemplates the filing and approval of a retail tariff, for end-user customers, and/or a wholesale tariff, for use by other carriers. This tariff process is not suitable for a VPC.

VPC state certification in fifty-one jurisdictions is impossible due to CLEC regulations in some states that prohibit certification for entities such as VPCs that do not provide dial tone to retail customers, do not have retail tariffs, and other state specific requirements.<sup>19</sup> In the alternative, interconnected nomadic VoIP service providers

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<sup>18</sup> Comments of NENA at 7. For its part, the National Association of Regulatory Utility Commissioners (“NARUC”) suggests that non-certificated service providers could be given access to numbering resources under proper circumstances. Comments of the National Association of Regulatory Utility Commissioners at 10. In such a circumstance, it would make no sense to grant PSTN numbering resources to non-CLEC certified VoIP providers and to deny ESQKs to non-certificated VPCs such as TCS.

<sup>19</sup> In fact, the Bureau’s recent Recommended Decision in the *Bright House* proceeding would lead to the conclusion that VPC service is neither “telecommunications” nor “telecommunications service.”

themselves would be forced to become certificated in all jurisdictions—a task which at a minimum would delay VoIP E911 deployment and strain ESQK resources.

As recent history demonstrates, those VPCs that have attempted to gain CLEC certification have met with mixed results because various jurisdictions have taken conflicting good faith positions (based on differing state laws and regulations) regarding VPC certification. For example, the Public Utilities Commission of Ohio (“PUCO”) refused to certify the VPC Intrado Communications Inc., as a CLEC on the ground that “its telephone exchange activities are restricted in scope and, thus, do not extend to the level of a CLEC.”<sup>20</sup> Instead the PUCO established a new designation known as a “competitive emergency services telecommunications carrier.”<sup>21</sup> In Virginia, Intrado has had difficulty negotiating an interconnection agreement because Embarq does not recognize it as a “carrier” and, as a result, Intrado has had to file a petition with the FCC seeking to arbitrate the issue.<sup>22</sup>

In TCS’ case, state certification would add little. TCS is a public company which has demonstrated the required level of integrity and has obtained CLEC registration in at least one state. Moreover, it already provides nationwide VPC service. TCS’ VPC service does not require the typical type of interconnection. It is provided from several locations, and is interstate in nature. Consequently, to the extent that any review of a VPC’s qualifications is appropriate, it should be done at the federal level and not on a state-by state basis. TCS does agree, however, with NARUC’s concerns regarding the

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Recommended Decision, *In the Matter of Bright House Networks, LLC et al., v. Verizon California, Inc., et al.*, ¶¶ 12-13, DA 08-860 (April 11, 2008).

<sup>20</sup> Finding and Order, *In the Matter of the Application of Intrado Communications, Inc. to Provide Competitive Local Exchange Services in the State of Ohio*, ¶7 Public Utilities Commission of Ohio, Case No. 07-1199-TP-ACE (Feb. 8, 2008).

<sup>21</sup> *Id.*

<sup>22</sup> Petition of Intrado Communications of Virginia Inc., *In the Matter of Petition of Intrado Communications of Virginia Inc.*, WC 08-33 (filed March 6, 2008).



need for resource recipients to comply with the reporting requirements of the Part 52 numbering rules and commits to complying with all applicable reporting requirements.<sup>23</sup>

**III. The Application Of Part 52's Certification Requirement Would Place A Strain On Numbering Resources, Result In A Delay In VoIP Deployment And Negatively Impact Upon Public Safety**

At present, TCS has been able to self-administer a sufficient number of ESQKs to meet the E911 requirements of its clients. In the long run, however TCS might not be able to acquire and manage ESQKs for shared use among its interconnected nomadic VoIP service provider customers. The negative consequences and disruption to the emergency service capabilities of VoIP providers would be significant if this were to occur. Interconnected nomadic VoIP service providers would be required to immediately seek certification in all fifty-one jurisdictions and obtain their own ESQKs. This would create confusion and delay VoIP E911 deployment. It would potentially exhaust the reservoir of assignable ESQKs and would be contrary to NENA recommendations. Moreover, it would require each PSAP to test with dozens (or hundreds) of interconnected nomadic VoIP service providers that might never actually use the ESQKs assigned to them.

These concerns are not inconsequential. Although it is impossible to address the question of the impact of VPCs on number conservation with complete precision, TCS' concerns are based on the following estimates which it believes are sound:

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<sup>23</sup> See NARUC Comments at 10.

1. For the purpose of this analysis TCS has assumed that there are approximately 1,300 interconnected nomadic VoIP service providers<sup>24</sup> and 6,100 PSAPs nationwide.<sup>25</sup>
2. Based on industry practice TCS estimates that at least 2 ESQKs would be required by every interconnected nomadic VoIP service provider to deploy to every PSAP in order to manage E911 calls.
3. Therefore, without VPCs to aggregate ESQKs, nomadic interconnected VoIP service providers would need up to 15,860,000 ESQKs ( $1300 \times 6,100 \times 2$ ) to deploy to all PSAPs.<sup>26</sup>
4. In contrast, a VPC is typically assigned 10 ESQKs per PSAP so that 10 different calls from a variety of VoIP providers can be processed simultaneously. Consequently, 2 VPCs would need only 122,000 ESQKs to deploy to all PSAPs ( $2 \times 10 \times 6100$ ).

As these estimates demonstrate, TCS believes the number conservation benefits involving the use of 122,000 ESQKs versus the use of almost 16 million ESQKs are clear.

The public safety benefits of using VPCs as ESQK aggregators are also evident.

On an average day, TCS routes over 100,000 E911 calls without difficulty. The

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<sup>24</sup> For various reasons, it is impossible to develop a completely accurate count of the number of interconnected VoIP service providers. For example, according to Packetizer "with all of the VoIP providers popping up all over the world these days, we gave up trying to compile a complete list of all those companies ourselves—there are just too many! By some estimates, there are more than 2000 companies that can rightly claim to be VoIP service providers."  
[http://www.packetizer.com/ipmc/service\\_providers.html](http://www.packetizer.com/ipmc/service_providers.html)

<sup>25</sup> According to NENA's 9-1-1 Fast Facts there are 6083 primary and secondary PSAPs.  
<http://www.nena.org/pages/Content.asp?CID=144&CTID=2>

<sup>26</sup> To give some sense of perspective, the recent March 2008 FCC Report entitled "*Numbering Resource Utilization in the United States*" notes that carriers filing FCC Forms 502 reported that only 627 million telephone numbers have been assigned to end users. In this context the figure of 16 million ESQKs is significant.

disruption, confusion, and even danger to our national E911 system that would be involved in forcing over 1,300 interconnected nomadic VoIP service providers to obtain, test, and maintain 16 million ESQs argues powerfully in favor of TCS' simple and easily granted Waiver request.

The negative impact that the Commission's position could have was recently recognized by The Association of Public-Safety Communications Officials-International ("APCO") in a Position Statement it posted on April 16, 2008. APCO indicated in part:

APCO International is concerned that some providers of VoIP Position Centers (VPC) may have to discontinue services to VoIP Service Providers (VSP) if they are denied access to pseudo Automatic Number Identification (p-ANI) codes.

APCO International respectfully requests that the Federal Communications Commission (Commission) fully examine the impact of a decision to deny VPC access to p-ANI codes and its affect on the ability of public safety answering points (PSAP) to locate VoIP 9-1-1 callers using current VPC services.

APCO International believes that if VPCs are forced to discontinue services to VSPs VoIP consumers may be at risk when calling 9-1-1.<sup>27</sup>

TCS believes that APCO is justified in its concern that consumers may be at risk if VPCs are forced to discontinue (or are unable to begin to offer) E911 services to VoIP service providers. It is imperative that the Commission act in the affirmative on the Petition.

#### **IV. TCS' Waiver Meets The Conditions Set Forth In The Navin Letter**

TCS is in compliance with the Navin Letter's waiver conditions. It is a public company subject to multiple levels of financial and managerial regulatory oversight by

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<sup>27</sup> *TCS and HBF Petition to Waive Part 52 of Commission Rules Position Statement*, APCO Government Affairs <http://www.apcointl.org/new/government/positionstatements.php> (April 16, 2008)

state and federal authorities. As a member of all national public service organizations<sup>28</sup>, it maintains its VPC operations to the highest industry standards in compliance with continuing membership standards of these emergency services organizations. TCS pays all relevant emergency service fees regarding its operations, and its customers subject to USF remit per requirements applied to them. Therefore, TCS satisfies the waiver conditions foreseen in the Navin Letter and should be accordingly eligible to receive p-ANI resources.

**V. If State CLEC Certification is Required, Obtaining One State Certification Should be Adequate for a Waiver**

TCS has obtained CLEC certification in Florida, Tennessee, Texas and Washington. However, as noted above, TCS is confident that universal CLEC certification is not achievable. Nonetheless, for purposes of a waiver petition, the Commission may hold that CLEC certification in one state is adequate for satisfaction of the policy outlined in the Navin Letter. TCS's Waiver Petition under such a scheme should be granted.

**VI. If Certification Of Some Form Is Necessary To Justify A Waiver, It Should Be From The FCC Or A National Public Safety Organization**

As explained above, CLEC certification is not the appropriate means by which to determine the financial, technical, and or operational readiness of a VPC, and many jurisdictions reject this responsibility. As an alternative, the FCC could establish a

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<sup>28</sup> TCS is a member of NENA, APCO, ComCARE, BENA, ESIF, and the E911 Institute as well as other relevant organizations - <http://www1.telecomsys.com/about/memberships/index.cfm>

simple waiver application process. This would permit the FCC to monitor VPCs and help preserve the integrity of the VPC emergency services marketplace.

As an alternative, some national emergency organizations have discussed the establishment of national registration or qualification programs. As either a supplement to or in lieu of, FCC registration, sanction by a relevant national public safety organization would serve as a reasonable alternative to individual state CLEC certifications. If the Commission should decide that either of these proposals is appropriate, it should take into account TCS's existing ongoing public safety responsibilities and grant TCS a temporary waiver for unrestricted access to p-ANI resources pending TCS's qualification pursuant to a new waiver qualification scheme.

## **VII. The TCS Waiver Petition Is Unique And Should Be Acted Upon**

TCS' waiver petition is unique and should be acted upon by the Commission. The fact that the FCC did not address other waiver petitions in this proceeding<sup>29</sup> should not preclude the Commission from addressing TCS' Waiver Petition. Likewise, the FCC should not be deterred by the fact that VPCs do not contribute to the universal service mechanism.

TCS' Waiver Petition is materially different from the other petitions because the company is not seeking telephone numbers in order to provide voice service. Moreover, if granted, the waiver would reduce the demand for p-ANI numbering resources (as they are classified today) while at the same time promote public safety and encourage the continued growth of interconnected VoIP services. In its petition, Qwest Communications Corporation, acting on behalf of its IP-enabled Services Operations

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<sup>29</sup> See *Porting Order* ¶20.

("QCC/IPES), has sought a waiver of Section 52.15(g)(2)(i) in order to obtain telephone numbers that QCC/IPES could use in providing VoIP services on a commercial basis to residential, governmental, educational and business customers<sup>30</sup> similar to the relief granted SBCIS.<sup>31</sup>

In contrast, TCS is not seeking traditional numbering resources in order to provide commercial telephone service to end users. Therefore, as noted previously, grant of TCS' request would in no way undercut the traditional distinctions that the Commission has drawn between the rights and obligations of carriers versus those of non-carriers in connection with the provision of telecommunications and other interconnected end user services.

The fact that VPCs do not contribute directly to the universal service support mechanism should also not affect the outcome here. VPCs do not provide the type of service which is typically subject to the universal service requirement.<sup>32</sup> Moreover, since both TCS' wireless and interconnected VoIP service provider customers are required to contribute, the grant of the proposed waiver will not impact upon universal service revenues.<sup>33</sup>

### Conclusion

In summary, the FCC should address the Waiver Petition filed by TCS because both the FCC's E911 and LNP efforts might be frustrated if interconnected nomadic VoIP service providers are not able to provide E911 capability for ported numbers

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<sup>30</sup> Qwest Communications Corporation *Petition for Limited Waiver of Section 52.15(g)(2)(i) of the Commission's Rules Regarding Numbering Resources*, (filed March 28, 2005).

<sup>31</sup> *Porting Order* at 20.

<sup>32</sup> See 47 CFR § 54.706.

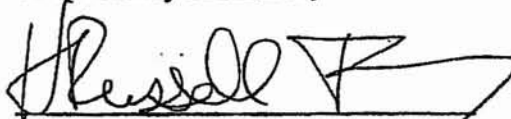
<sup>33</sup> If TCS were a carrier, which it is not, the revenues that it received would arguably be exempt as "revenues from resellers" in that the revenues would be derived and from services provided to other entities that were contributors to universal service support mechanisms and in essence resold.



because TCS was unable to obtain ESQKs, and the continued deployment of interconnected VoIP service might be delayed. The facts demonstrate that there is no need to change the current self-administration process because it works seamlessly. Moreover, TCS is certified in at least one state. Therefore it would be appropriate for the FCC to waive the provisions of Section 52.15(g)(2)(i) so that TCS is deemed to be an eligible user of ESQKs in all jurisdictions regardless of certification and is thereby eligible to receive numbering resources.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "H. Russell Frisby, Jr.", written over a horizontal line.

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**The FCC Acknowledges Receipt of Comments From ...  
TeleCommunication Systems, Inc.  
...and Thank You for Your Comments**

**Your Confirmation Number is: '20081020958880 '**

**Date Received: Oct 20 2008**

**Docket: 08-206**

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*updated 12/11/03*

**CERTIFICATE OF SERVICE**

I hereby certify that a copy of TeleCommunication Systems, Inc.'s Comments were served this 20<sup>th</sup> day of October 2008 by electronic filing and e-mail to the persons listed below.

  
Gary D. Johnson

The following parties were served:

Via ECFS

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### CERTIFICATE OF SERVICE

I hereby certify that a copy of TeleCommunication Systems, Inc. Comments were served this 21<sup>st</sup> day of April 2008 by electronic filing and e-mail to the persons listed below.

  
\_\_\_\_\_  
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# Corridor Inc.

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## TELECOM TITAN

**Maurice Tosé &  
TCS deliver in a  
wireless world**

**BUS** **Montgomery Inc.**





## TELECOM TITAN

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in a wireless world | p. 8

*On the cover: Maurice B. Tosé, president & CEO of  
TeleCommunication Systems Inc. Photo by John Keith.*



# TELECOM TITAN

## Maurice Tosé & TCS deliver in a wireless world

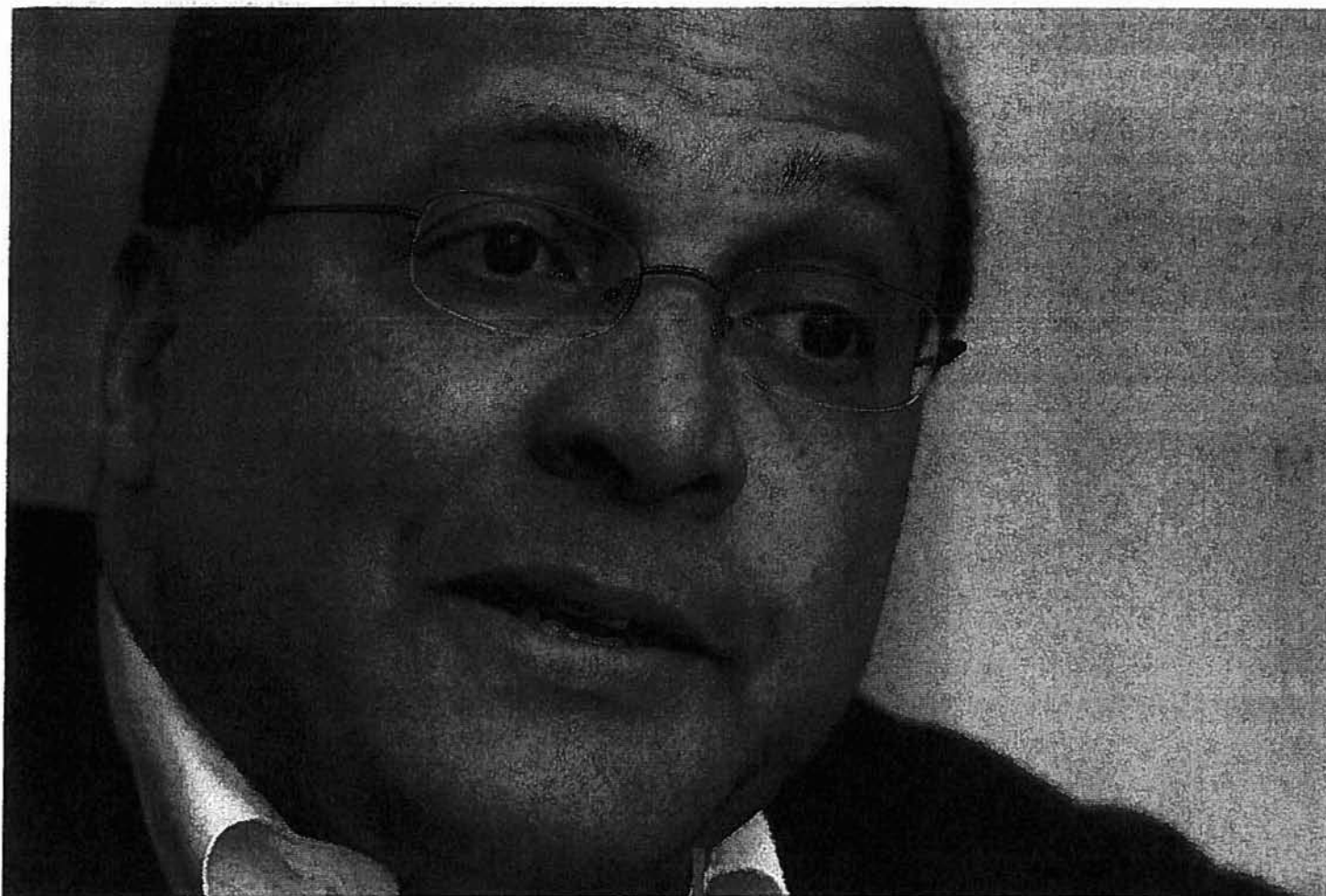
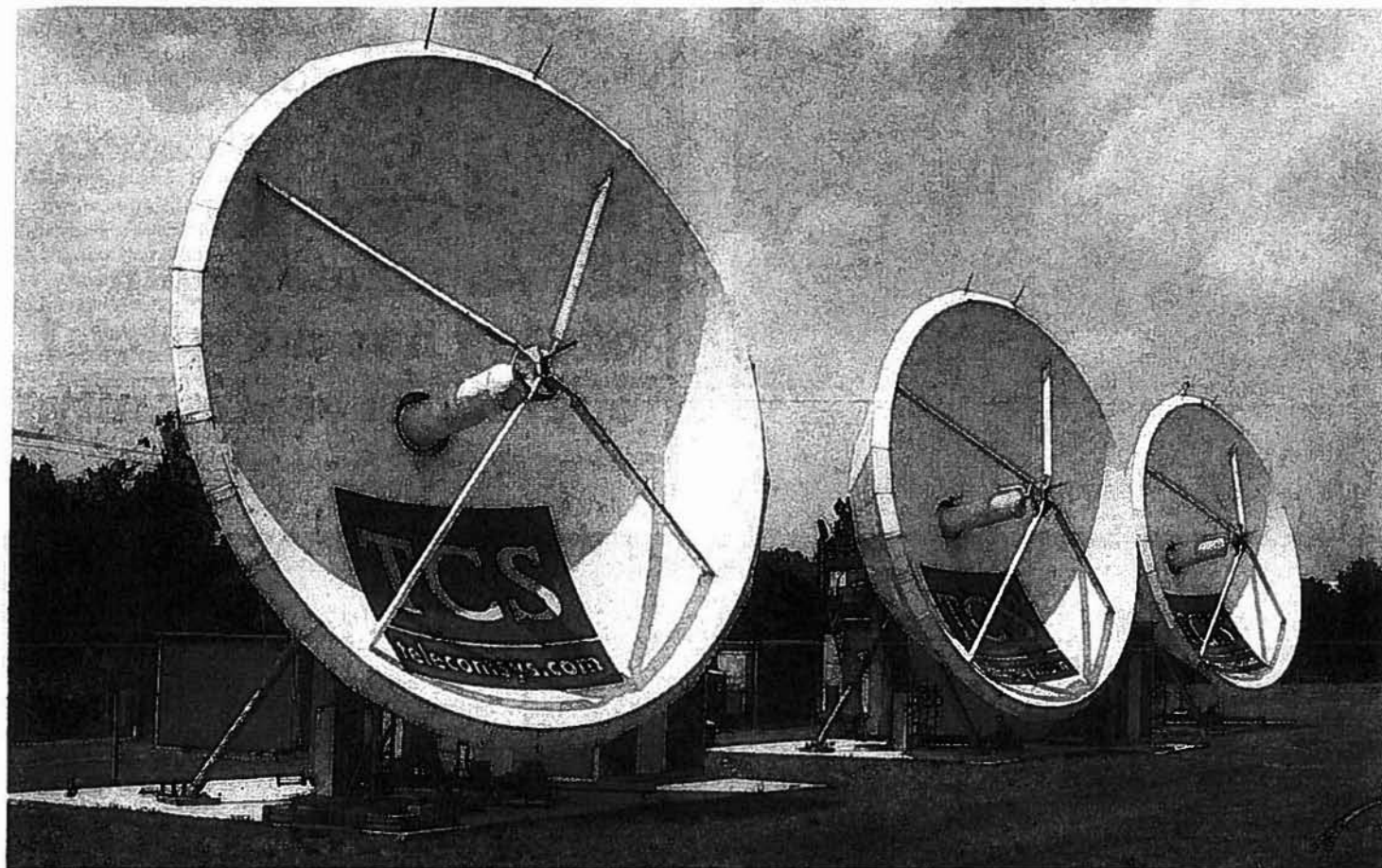


PHOTO BY JOHN KETH

*Maurice B. Tosé founded Annapolis-based TeleCommunication Systems Inc. with his wife Teri in 1987.*

**“We dance with  
elephants...”**

*- Maurice B. Tosé, founder of TeleCommunication Systems Inc.*



TeleCommunication Systems Inc.'s teleport in Manassas, Va. supports the company's end-to-end solution needed for today's mission-critical communications.

Maurice B. Tosé sleeps well at night.

The founder of Annapolis-based TeleCommunication Systems Inc. (TCS) knows his firm's technology saves millions of people's lives.

The mission-critical wireless communications provider splits its workload between the federal government, public safety and commercial wireless carriers — from providing highly secure connections for military on the battlefield to pinpointing where a stranded wireless 911 caller is located.

The 500-person firm, with 145 employees in Annapolis, is hoping to change the face of wireless creating cutting edge solutions that are competing neck and neck with

the big boys from Lockheed Martin and Northrop Grumman Corp. to Lucent and Nokia.

"We dance with elephants," said Tosé, who is chairman, president and CEO of the minority-owned firm. "And it's not to get stepped on by those elephants, but it's convincing the large telecom carrier customer — as well as the large government customers — that we are capable of continuing to do bigger, more technically-challenging products and services."

The company is coming off a solid year of significant government wins including being named one of the prime contractors for a \$750 million contract to provide satellite communications and

services for federal agencies and teaming up with Verizon Business on a \$1.8 billion contract to provide services to its government customers in the National Capital Region, which includes Washington, D.C. and parts of Maryland and Virginia.

"It's been our best year ever," said Tosé.

The company, which went public in 2000, reported \$144 million in revenue in 2007 — a 15 percent increase from \$124.9 million in 2006.

"This is a small company with its hands in a lot of different areas," said Scott Sutherland, managing director at Los Angeles-based Wedbush Morgan Securities, who covers the company. "Clearly,

there's a lot of value in the parts."

The war on terror has been one of the most significant parts to the business as it helped TCS create a whole family of products under the SwiftLink brand, which allow for rapid deployment of communication using wireless, satellite and terrestrial networks.

And TCS officials are seeing even more demands in satellite services, especially in support of government activity in the Middle East and Africa.

But the company isn't all about government forces and terror-fighting operations.

Years ago, Tosé predicted that the cell phone would replace the

*continued on the next page >*

now archaic pager as the primary source of instant communication. He was right.

And now text messaging has exploded, with TCS — which provides text-messaging software to U.S. wireless carriers — at the height of that explosion.

Last year, TCS technology delivered 80 billion text messages — more than double 2006's volume, Tosé said. That's about 25 to 30 percent of the more than 300 billion U.S. text messages delivered last year, according to CTIA, an international wireless association.

Tosé expects the number of text messages to double again this

year with continued strong growth over the next two to four years.

TCS has already received \$12 million in orders for message software and related systems from leading carriers for delivery in the first half of this year — that compares to an average of about \$4 million per quarter in 2007.

Another TCS segment taking off is the company's location information solutions for 911 wireless and Voice over Internet Protocol (VoIP) callers.

TCS provides location information of Enhanced 911 — or E911 — calls for over 100 million U.S. subscribers of more than 50 wireless and VoIP carriers. It han-

**"Satisfying very demanding customers that had security requirements began our leg into the special operations community."**

- Maurice B. Tosé, founder of TeleCommunication Systems Inc.



PHOTO COURTESY OF TELECOMMUNICATION SYSTEMS

TCS routes and delivers over 110,000 wireless and VoIP E911 calls per day across the United States through its Network Operations Center in Seattle.



dies over 110,000 E-911 calls a day.

All of the company's technology is closely guarded. To date, TCS has 56 patents, with another 190 patent applications pending.

Tosé takes pride in those patents and protects them. In May, the company was awarded \$10 million from Sybase 365, which infringed on a TCS patent that enables wireless subscribers to send messages to subscribers in other wireless carrier networks by simply entering the recipient's phone number.

TCS is currently suing Research in Motion Ltd., the maker of the BlackBerry, for infringement of a TCS patent on technology that allows users access to multiple e-mail accounts on their wireless devices.

Tosé's pride may come from his stint in the U.S. Navy, where he served eight years of active duty, which included teaching at the U.S. Naval Academy.

While he enjoyed the military, he knew the corporate world is where he belonged and would often sit in the classroom and dream of starting his own business.

"The seed was planted, even as a midshipman," said Tosé, who is currently a commander in the U.S. Navy Reserves.

Prior to TCS, Tosé was the director of Department of Defense programs for Silver Spring-based Techmatics Inc., where he was responsible for the marketing and management of systems integration contracts for the federal agency.

In 1987, he and his wife, Teri, co-founded TCS, initially as a military contractor for software development and network projects. It wasn't so easy, despite his expertise and connections in the industry.

"We ran up credit cards, exhausted all the dollars we had in the bank, and borrowed from family and friends that believed that we could do it," Tosé said.

Tosé spent his time raising necessary funds and convincing potential customers that he could get the job done.

"Similarly, those two things con-



PHOTO COURTESY OF TCS

*TCS' SwiftLink line of products and services provides secure, deployable communications for government agencies.*

tinue across the life cycle of a company," he added. "You go through periods where you have to raise additional cash, be it you've won an additional contract and you need cash flow to service it and it's continuing to convince customers that you can do the next bigger job."

Tosé has done plenty of convincing.

TCS started with a small contract from the city of Annapolis and grew from there.

In 1990, the company won a contract with the U.S. Special Operations Command in Tampa, Fla. This first big win handling local area networks put TCS on the map, Tosé said.

"Satisfying very demanding customers that had security requirements began our leg into the special operations community," he said.

In 2006, the U.S. Army awarded a five-year \$5 billion worldwide satellite systems contract to six vendors including TCS.

"It's opened up a lot of opportunities and customers we didn't have access to before," he said.

Moving forward, Tosé is showing no signs of slowing down as the company goes after more contracts in 2008.

"We go back to our foundation — convincing demanding customers that you can perform the service and produce the product that they need," Tosé said. "That's what we do today, day in and day out." >

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